BEDSIDE MEDICINE FOR BEDSIDE DOCTORS

An open forum for brief discussions of the workaday problems of the bedside doctor. Suggestions for subjects for discussion invited.

OBSCURE GALL-BLADDER DISEASE

STANLEY H. MENTZER, SAN FRANCISCO.—The most important single factor in the diagnosis of obscure gall-bladder disease is the history. Upon it may rest the diagnosis, the proper course of treatment, and the prognosis. It may nullify laboratory data and deny x-ray findings, and it may demand surgery or refuse it when other features of the case seem to warrant otherwise.

There are three main diagnostic features that deserve detailed study in the history of obscure biliary disturbance. Upon them rest the major factors in the differential diagnosis. They are: pain, qualitative food distress, and gas.

The first of these, pain, is often denied by the patient. She will insist she never has any pain. Her trouble is simply "distress," a heavy sensation indefinitely localized in the upper abdomen. It may not radiate nor localize at any time. It does not double her up in agony nor is it usually severe enough to warrant medication for its relief. It is simply a distress of an ill-defined nature. It is related to food, however, and this may be quite characteristic. When there is distress it is present an hour or an hour and a half after certain foods. Occasionally it is relieved by a little additional food, but not with the regularity and definiteness that food affords an ulcer pain. It does not occur with any regularity and, while there may be long periods of relief, there is not the characteristic intermittency of the ulcer syndrome.

The patient often ascribes her distress to some food that probably was not the offender, for she may not have noted any particular kind of food that brings on the trouble. Careful inquiry into the latter, however, will usually reveal a characteristic type of food that is responsible. But this may have been so indefinite that the patient has not been aware of it. Soda is occasionally taken with more or less relief, but never with the regularity or success that the ulcer patient enjoys. The distress is limited, disappearing in the course of an hour or so, or it may occasionally completely vanish after the patient has belched. Atropin in 1/75 grain doses is the best alleviator of it.

The qualitative food distress that these patients suffer is not characteristic. There are usually suggestive features that, when studied in detail, give a clue to the trouble, but the classical distress from eating fats, sweets, and sour food is absent. The interpretation of qualitative food distress is so much abused by the student that it is probable we are often misled by our own histories. The patient who is unable to eat a fried pork chop may say in the next breath that she enjoys fried potatoes without distress, or vice versa. The man who cannot eat a salad with mayonnaise or Louie dressing is able to handle fresh tomatoes in abundance. Or the woman who cannot tolerate cake or pastry is able to eat candy joyously. These, of course, are not instances of qualitative food distress and yet they are cited as such frequently.

I think it may safely be said that the patient with an early or obscure gall-bladder lesion will complain of one type of food rather than all three. And a carefully taken history will show that this patient is really sensitive to either fats, sweets, or sour foods. She is often able to eat a food that at one time distressed her and now does not, but careful questioning will prove that a large quantity of that food will bring back her trouble. Indeed, this is one of the most characteristic features of early gall-bladder disease. The patient may be able to eat a heterogeneous mixture of many kinds of food, including her regularly "intolerant" food, but this is possible only if small quantities are eaten at a time. It is the large meal or the large quantity of one type of food that induces distress in these patients. How often we hear that the patient can eat a small quantity of fats, sweets or sour foods, but that the trouble follows when quantities of a certain food that are ordinarily normal initiate the distress. And in terms of pathologic physiology, is this not just what we should expect? The slightly diseased gall bladder is able to function partially; it concentrates bile somewhat, and it is able mechanically to empty partially. Why should it not be able to partially handle the burden thrust upon it? But to expect that disabled organ to function as a normal one is unreasonable, is it not? In thinking thus, in terms of pathology, the course to be followed in treatment is obvious. These gall bladders should not be treated surgically. They are partially functioning organs and can do a reasonable amount of work. The task put upon them should be limited, but they should not be completely out of use as either a cholecystostomy or cholecystectomy will do. And this holds true for the partially functioning gall bladder, whether it is full of stones or not. Gall bladders that contain stones yet function partially will invariably be essentially noninflammatory. As secondary infection occurs, clinical symptoms of distress are increased. Surgical treatment may then be considered in the therapy, but it should not be done in the early gall-bladder lesion, for it is surprising what a large percentage of the population pass through life with a gall bladder full of stones that has not given much evidence of its presence. There may be some trouble, of course, but if that distress is not disabling or too severe, is it not better to make the most of it rather than deprive

the patient of the partial use that he is having from it?

The gas that these patients suffer from is quite characteristic. It is not flatulence, though intestinal gases usually accumulate concurrently from the actual indigestion that follows a partially functioning gall bladder. If it is remembered that bile from a diseased gall bladder is less in amount and less concentrated than that from a normal gall bladder, it can be readily appreciated that fats especially can be handled in small amounts only. The more fats, sweets, or sour foods that are eaten at a single time the greater will be the demand for concentrated bile in large quantities for their digestion. The less bile that is available, and particularly the less concentrated bile that is available for digestion, the more intestinal indigestion and gas that will subsequently follow.

The gas these patients complain of is belching. It occurs an hour or more after eating and it is usually belched up in one large amount, with considerable if not complete relief. The belching that many persons have five or ten minutes after eating is not gas from indigestion; it is air that is regurgitated that has been swallowed with food. This, of course, has no relation to gall bladder disease. Yet it is interpreted as belching from indigestion in at least 50 per cent of the referred patients that I see. Certain foods particularly cause gas, even in normal persons. These should not be considered seriously in evaluating the gas our patient may be suffering.

As a general rule, the more obscure the gall-bladder lesion the more care that should be taken in eliciting and evaluating the history, for it is the most important single factor in the diagnosis and prognosis of the case.

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STERLING BUNNELL, SAN FRANCISCO.—That the history is most important in the diagnosis of obscure gall-bladder disease, I can heartily agree. A clear convincing history, even in the absence of gross pathological operative findings, justifies the removal of the gall bladder, as has been repeatedly proved both microscopically and by cure of the patient. I cannot agree, however, that the three main diagnostic features are pain, qualitative food distress, and gas. These can be produced by even pylorospasm alone. Not that the value of studying these three symptoms in a detailed way should not be encouraged, but for a clear workable diagnostic conception, should we not think with a wider and more rational scope? Equally important are such features as local tenderness, the history of bilious attacks when young, the possible etiology such as catarrhal jaundice, typhoid or intestinal infection, the general type of patient, and neurotic tendency, the general toxic symptoms, chilliness, fever, myocarditis, arthritis, the group of reflex symptoms, pylorospasm, nausea, vomiting, splinted respiration, the chronicity of symptoms and, finally, the deductive reasoning, grouping all of the symptoms in their proper relation and judging the case history as a whole.

What is gall-bladder disease? Stone and infection are quite different and so is aseptic distention of the gall bladder from obstruction such as overacting cystic valve or kink, stone or swelling in the cystic duct, and these conditions act in different ways. What do symptoms mean unless coupled with pathology? So how can it be stated what the symptoms are of obscure gall-bladder disease?

The gall bladder does not cause symptoms from the loss of its function. Fats, sweets, and sour food may alike cause indigestion, though the bile acts only on the fats. The indigestion results from the deranged function of the stomach due to the reflex irritation from the gall bladder, and these foods increase the pylorospasm. The gas complained of is not from the lack of concentrated gall-bladder bile. Gas comes from aërophagia and bacterial and enzyme fermentation of proteins and carbohydrates and not from fats. In gall-bladder irritation hyperreflex action encourages aërophagia, but the feeling of gaseous distention comes much more from pylorospasm and distention and spasm of the gall bladder than from gas itself. That the gall bladder still has partial function is no contraindication to its removal. Its lost functions are readily compensated for by the body. The decision for operation is based instead on the degree of severity of the symptoms. Removal of the infected gall bladder should be done early before infection is established throughout the biliary system and before the stage of dangerous complications has been reached.

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CHARLES T. STURGEON, LOS ANGELES.—In the typical case of gall-bladder disease it is very easy to make a diagnosis, and the treatment at once is apparent. But in the mild or obscure case the diagnosis is not easily made, as frequently all the symptoms are referable to the stomach and not to the gall bladder.

It is in this type of case as Doctor Mentzer mentions in his article that a carefully taken history is by far the most important single factor in making the diagnosis.

The patient will always ascribe the distress or attack to some particular article of food. This particular article of food may change with each attack, but nevertheless the patient is always sure of just what food is responsible.

My experience has been that diet does not help this patient, and that sooner or later he comes to surgery.

It is not the presence of stones so much as the complications of hepatitis and pancreatitis that demands surgical treatment of cholecystitis. These complications may be so slight in mild cases of cholecystitis that they cannot be diagnosed clinically, but if allowed to go untreated for too long

a time very slight benefit can be expected from surgery.

I do not wish to convey the idea that all obscure cases of cholecystitis should be operated on at once. A careful diet as suggested by Doctor Mentzer should be tried. If no relief is obtained from this diet, or if symptoms return as soon as the patient returns to a normal diet, I believe the patient should then be treated surgically.

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THOMAS O. BURGER, SAN DIEGO.—Doctor Mentzer's emphasis of history is the most valuable single agent in establishing a diagnosis of obscure condition of the gall bladder. The history in gall-bladder disease is equally as important as in any other condition that we have in the abdominal cavity, or it may be of greater importance. However, many of us are unable to obtain an intelligent, tangible history that is at all definite. "An indefinite dyspeptic" history which emphasizes a distress in the upper abdomen all the way from soreness to severe pain, especially if gas is a prominent accompaniment, is a more or less broad diagnosis for chronic cholecystitis. But before accepting this method of diagnosis it is urgent to rule out all other possible causes of complaints.

Cholecystography gives a definite picture of function and helps to show stones which would otherwise not be found on a flat plate. Therefore, it is imperative in all questionable diagnoses to have this method carried out and also some of the other tests that are available in gall-bladder conditions. There are very few exceptions to the fact that chronic cholecystitis with stones or without is of infectious origin (cholesterol stones may be an exception). Therefore, we are to consider the conditions from a standpoint of irritation to the duodenum, that is, the functional or mechanistic standpoint of the digestive organs plus the problem of infection which has its definite effect here as well as in other focal infection. Cardiac dysfunction is caused undoubtedly very frequently by gall-bladder conditions, and in this instance I think the mechanistic as well as the focal infection idea may both be considered from the standpoint of chronic cholecystitis.

Heart complication is sometimes very difficult to diagnose as to whether its cause is the heart or the gall bladder. These are the patients that unquestionably need what might be termed a clinic diagnosis by the internist, the x-ray man, the gastro-enterologist, and the cardiologist. At times these different specialists are hard pressed to decide which and what shall be done. After a complete examination has been done thoroughly, it is a matter for the good general doctor who can use horse sense and judgment to determine whether or not this patient shall be treated medically from the vague or indefinite cause of trouble, or whether he shall be subjected to surgery. The conscientious surgeon is not willing to open these abdomens unless there is a positive finding reported by the laboratory, or a definite physical tenderness, or a typical history. This last, as Doctor Mentzer mentioned, often emphasizes that which is telltale, and yet we at times are chagrined to find little or nothing where we had expected definite pathology. Again we must remember that gall-bladder symptoms and findings are not always constant.

University of California Doctor Tells Diagnostic Traits of Undulant Fever.—As an aid to physicians of the state, Dr. J. C. Geiger, associate professor of epidemiology at the University of California Hooper Foundation for Medical Research, has just summarized present knowledge of the comparatively recently discovered disease undulant fever, which is transmitted to human beings by goats, cows, and pigs, in an article for the bulletin of the California State Department of Public Health.

Undulant fever, he says, is oftentimes a puzzle to the physician, as its symptoms are suggestive of such other diseases as typhoid fever, malaria, tuberculosis, rheumatism, focal infections, sinusitis, appendicitis, and tularemia. He stresses the point that laboratory analyses offer the most dependable means of deciding whether or not patients have the disease.

He says: "As far as America is concerned, undulant fever is comparatively a newly recognized disease. The first case was reported about twenty-four years ago. The available evidence indicates that the causative organisms are of three general types, and usually classified as to host. The variety known as *Brucella melitensis* ordinarily prefers the goat; *Brucella abortus* ordinarily prefers the cow, and *Brucella abortus* var. *porcine,* ordinarily prefers the hog. Any of these may cause undulant fever in man.

"The epidemiologic evidence is far from being definite, complete, or conclusive. There is no doubt that raw milk, whether it be from goats or cows, offers indisputable chances for infection, provided the herds supplying them are shedding the organisms in sufficient amounts and of sufficient virulence. The low index of the disease in children and the present statistical superiority of the disease, especially in rural sections, has been used as a basis for assuming that many cases may be due to contact with infected animals. Such control measures as pasteurization of all milk and the elimination of infected animals from herds delivering certified raw milk are advocated."—*University of California Clip Sheet.*

Tulane University Names Medal After University of California Faculty Man.—Word has been received on the Berkeley campus of the University of California that Tulane University, in New Orleans, La., has created a public health award for outstanding senior or graduate students which will be called the "Geiger Medal," in honor of Dr. J. C. Geiger, associate professor of epidemiology in the California Medical School.

In an editorial in the *American Journal of Public Health,* mention of the new award is made as follows:

"There has been established at Tulane University an award to be known as the 'Geiger Medal,' to be granted yearly to that student of the university, either senior or graduate, who prepares the best thesis on some phase of public health of particular interest to the southern states or countries contiguous to them.

"We cannot but rejoice at this recognition of public health by our leading southern university.

"The medal is named in honor of Dr. J. C. Geiger, at present associate professor of epidemiology in the Medical School of the University of California. Doctor Geiger is well known for his epidemiological studies in connection with the work on botulism done by the United States Public Health Service with the department of hygiene of the University of Chicago and the University of California. He was assistant health commissioner of the city of Chicago, and was one of those who, to all intents and purposes, was dropped by Mayor Thompson."—*University of California Clip Sheet.*